Quick Use and Setup Guide

Rear-projection HDTV Monitor

Let's make things better.

PHILIPS

CONTENTS

Important Notice/Warning 1
Making Basic TV Connections 1–2
Operating the Television and Remote Control 2–3
Using the Installation Features 4–6
Using the Picture-in-Picture (PIP) Feature 6–7
Adjusting the Manual Converge Controls 8

As an Energy Star® Partner, Philips Consumer Electronics has determined this product meets the Energy Star® guidelines for energy efficiency. Energy Star® is a U.S. registered mark. Using products with the Energy Star® label can save energy. Saving energy reduces air pollution and lowers utility bills.

IMPORTANT

This owner's manual is used with several different television models. Not all features (and drawings) discussed in this manual will necessarily match those found with your television set. This is normal and does not require that you contact your dealer or request service.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD DO NOT EXPOSE THIS UNIT TO RAIN OR EXCESSIVE MOISTURE.

MAKING BASIC TV CONNECTIONS

BEST VIEWING

The major benefit of this projection television is its large viewing screen. To see this large screen at its best, test various locations in the room to find the optimal spot for viewing.

NOTE: Be sure to allow a free flow of air to and from the perforated back cover of the set.

To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot—for example, in direct sunlight or near a heating appliance.

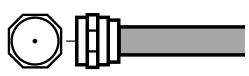
Magnetic fields, such as those of external speakers, may cause the picture to distort if the speakers are placed too close to the television. Move the magnetic field source away from the TV until there is no picture distortion.

CABLES AND CONNECTORS

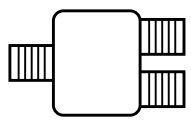
If you are new to making TV hookups, *you may want to read this section. (The cables and connectors discussed are not supplied with your set. You can buy them at most stores that sell audio or video products. Or call our Customer Care Center at 1-800-531-0039.)*

This publication provides you with examples of basic connections. See pages 6–17 in the Directions for Use manual for more information on connections, along with connection examples.

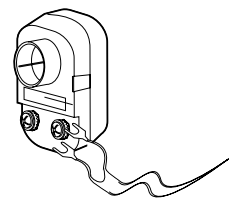
A 75-ohm **coaxial cable** connects signals from an antenna or a cable TV company to the antenna jack on the back of the TV. Coaxial cables use "F" connectors.



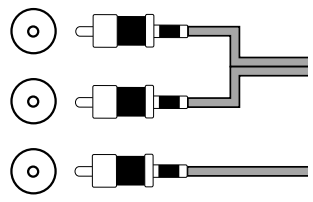
A **two-way signal splitter** enables you to take a single antenna or cable TV signal and supply it to two different inputs.



A **300- to 75-ohm twin-lead adapter** accepts the antenna cables (called twin-lead wires) from an antenna, allowing you to connect the antenna signal to the TV.

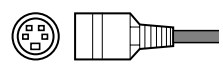


Video and audio cables with standard RCA (phono) connectors connect the video and audio jacks of accessory devices such as VCRs and DVD players to the jacks on the TV.

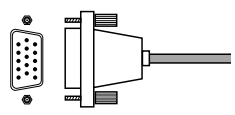


To simplify making connections, the connectors are usually color coded. The jacks on your TV are likewise color coded to match the colors of the connectors. The coding is as follows: yellow for video (composite) and red and white for the right and left audio channels, respectively. Use an audio cable with a white connector when making mono, or nonstereo, connections. The connectors of video cables used to connect component video or RGB (high-resolution) jacks are often color coded red, green, and blue. Component video connections provide you with the highest possible color and picture resolution.

An **S-Video cable** connects devices such as DVD players, VCRs, or camcorders to your TV. S-Video provides better picture performance than regular (composite) video connections. S-Video cables can be used only with S-Video-compatible accessory devices. You must also connect the left and right audio cables along with S-Video because the S-Video jack carries only the picture signal, not the sound.



A **DB15 cable** makes an RGB connection to the HD INPUT-AV 5 jack on the rear of the TV.



ANTENNA OR CABLE TV

This section shows you how to make a basic TV connection using a cable TV or antenna signal.

If you have cable TV service, you'll simply connect the coaxial cable lead-in from the cable TV company to your TV. If you intend to connect a VHF/UHF antenna, you may need a 300- to 75-ohm adapter, which is not supplied with your TV.

NOTE: *You should be able to buy optional accessories such as a VHF/UHF antenna or a 300- to 75-ohm adapter at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039.*

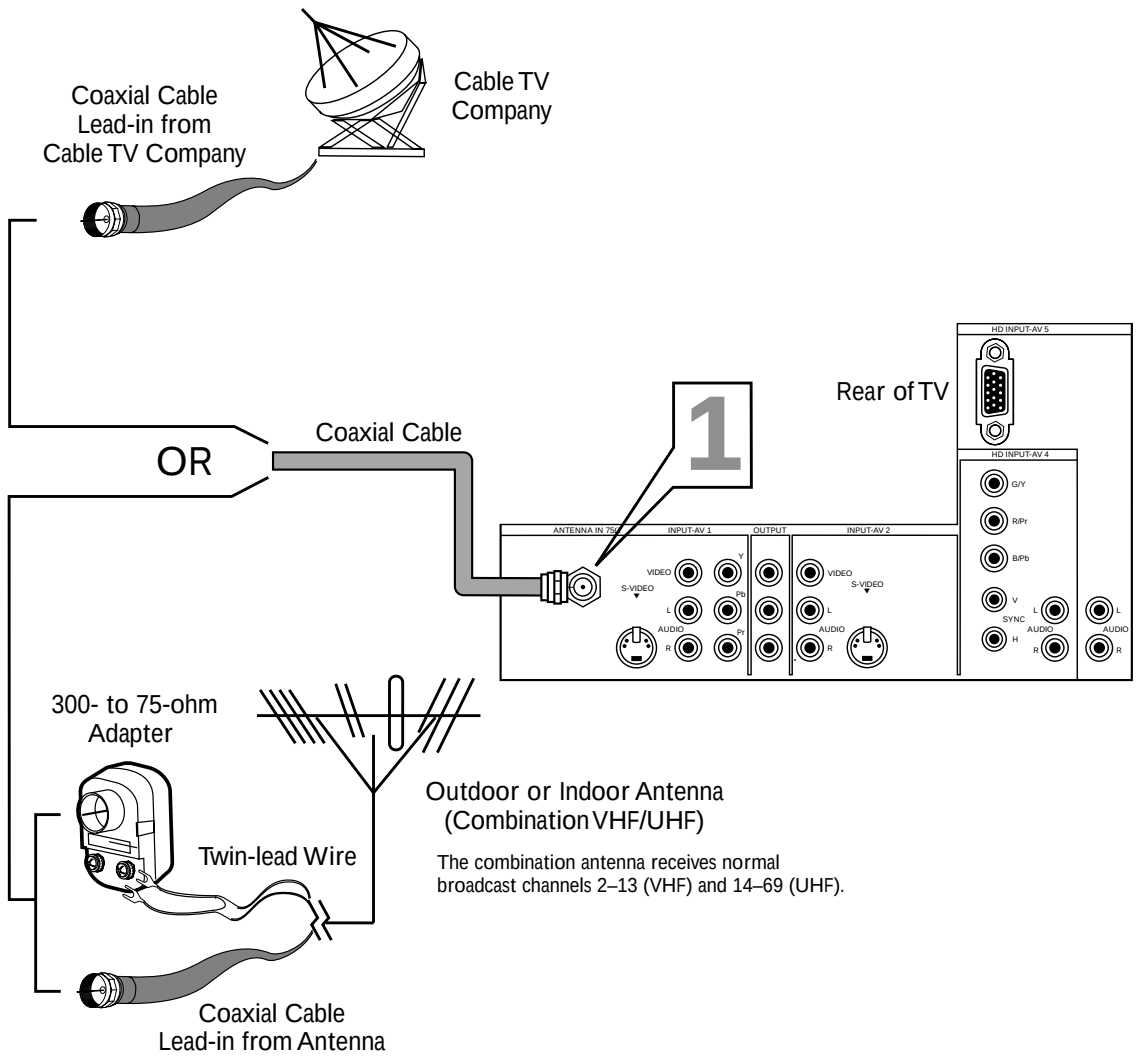
BEGIN

1 **Connect the Cable TV or antenna signal to the ANTENNA IN 75Ω jack on the rear of the TV.**

NOTE: If you are using an antenna with a round coaxial cable (75Ω), then you are ready to connect to the back of the TV. If your antenna has a flat, twin-lead wire (300Ω), you must first attach the antenna wires on a 300- to 75-ohm adapter. Then push the round end of the adapter onto the ANTENNA IN 75Ω jack on the rear of the TV.

2 **Insert the TV's power plug** into the wall power outlet.

STOP



MAKING BASIC TV CONNECTIONS (CONTINUED)

CABLE CONVERTER BOXES

Follow the steps below to connect a cable converter box to your TV.

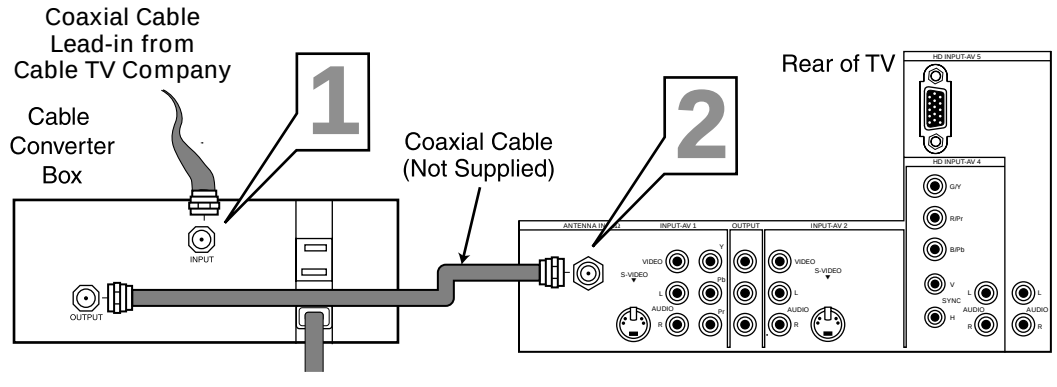
To make the connections in this example, you will need one coaxial cable (75Ω).

***NOTE:** The coaxial cable is not supplied with your TV. You should be able to buy one at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039.*

BEGIN

1. **Connect your cable TV signal** to the INPUT jack on the back of the cable converter box.
2. **Connect a coaxial cable** from the OUTPUT jack on the back of the cable converter box to the ANTENNA IN 75Ω jack on the rear of the TV.
3. **Insert the TV's power plug** into the wall socket.

STOP



OPERATING THE TELEVISION AND REMOTE CONTROL

TELEVISION

USING THE TV BUTTONS

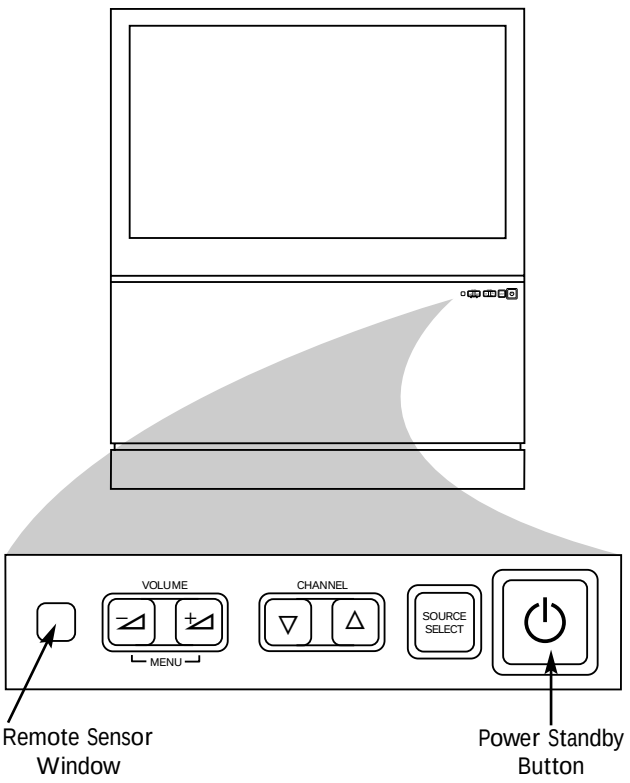
Should your remote control be lost or broken, you can still change some of the basic picture and sound settings with the buttons on the TV. Follow the steps below to familiarize yourself with the functions of the TV buttons.

BEGIN

1. **Press POWER/STANDBY** to turn the TV on (or off). Allow about 10 seconds for the TV to power on.
2. **Press the VOL(ume) + or – buttons** to decrease or increase the sound level.

   Press the VOL(ume) + and – buttons simultaneously to display the onscreen menu. After the menu appears, use these buttons to enter submenus and make selections or adjustments. (Use the CH[annel] Up and Down buttons to move up and down in the menu or submenus.) Press both VOL(ume) buttons simultaneously to back out of the onscreen menus.
3. **Press SOURCE SELECT** to choose from among the signal inputs you have connected to the TV.
4. **Press the CH(annel) Up and Down buttons** to select TV channels.

STOP



HELPFUL HINT

You can press any of the buttons on the front of the TV to turn the TV on, but you must press the Power/Standby button to turn the set off.

REMOTE CONTROL

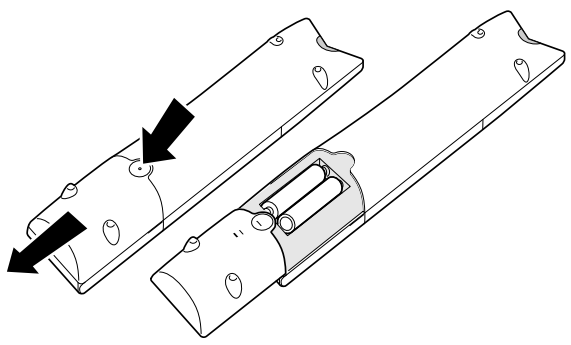
INSTALLING BATTERIES

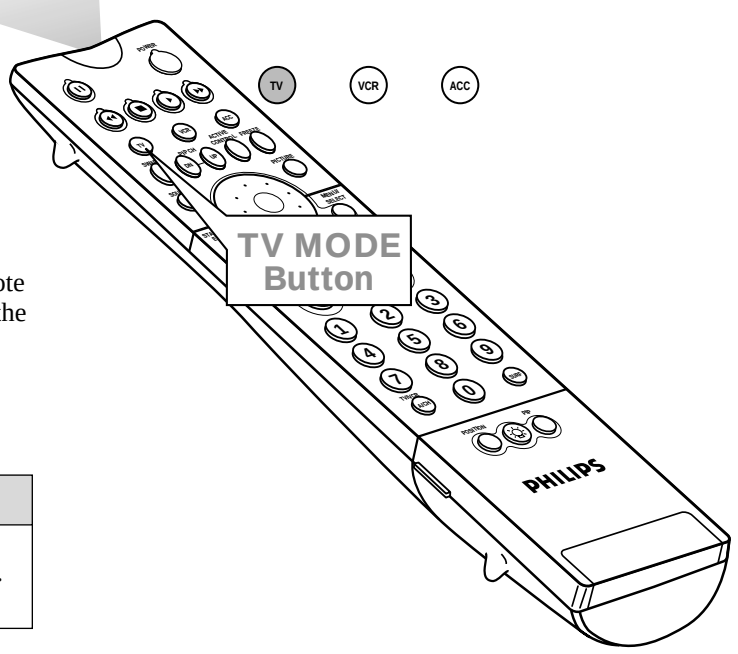
To load the supplied batteries into the remote, follow these steps.

BEGIN

1. **Gently press and hold the indention** on the back of the remote and slide the battery cover off the remote.
2. **Place the two "AA" size batteries in the remote's battery case**. Ensure that the (+) and (–) ends of the batteries line up correctly with the (+) and (–) inside the case.
3. **Slide the battery cover back into place**.

STOP





POINTING THE REMOTE

Press the TV mode button on the remote to ensure that the remote sends its commands to the TV. When operating the remote control, point the remote toward the remote sensor window on the TV.

☑ CHECK IT OUT

You can set up your TV remote control to work with accessory devices such as VCRs, DVD players, and cable converter boxes. See pages 18–23 in the *Directions for Use* manual.

BATTERY USAGE CAUTION

To prevent battery leakage that may result in injury to you or damage to the remote control:

- Install ALL batteries correctly, + and –, as marked on the unit.
- Do not mix batteries (OLD and NEW or CARBON and ALKALINE, etc.)
- Remove batteries when the remote control is not used for a long time.

Do not take apart, heat, or put batteries in fire.

HELPFUL HINTS

- Be sure to point the remote toward the sensor window on the TV or accessory device you are using the remote to operate.
- Press the correct mode button for the device you want to operate: TV, VCR, ACC (for accessories other than VCRs).
- Be within about 30 feet (10 meters) of the TV or accessory device you are using the remote to operate.
- Avoid dropping the remote on hard surfaces.
- Do not use harsh chemicals to clean the remote. Use only a soft, lightly moistened cloth.

OPERATING THE TELEVISION AND REMOTE CONTROL (CONTINUED)

REMOTE CONTROL

VCR control buttons
Press to pause, rewind, stop, play, or fast forward a videotape.

TV • VCR • ACC
(Mode buttons) Press to send remote signals to either the TV, VCRs, or other accessory devices such as cable TV converters, satellite receivers, DVDs, or laser disc players. (You may need to program the remote to work accessory devices. See pages 18–23 in the *Directions for Use* manual that came with your TV.)

PIP buttons: SWAP, PIP CH DN/UP, FREEZE
Press to operate the Picture-in-Picture (PIP) features. See page 7 in this publication for more information on using these buttons.

Sound
Press to select an AutoSound™ control. (See page 25 in the *Directions for Use* manual.) Choose from three factory-set controls—Voice, Music, and Theatre—and a Personal control that you set according to your own preferences through the onscreen Sound menu. The three factory-set controls will tailor the TV sound so as to enhance the type of program you are watching.

Status/Exit
Pressing the button once shows the current channel number, name (if set), time (if set), Sleep Timer setting, and sound setting (stereo, mono, SAP, or mute). Pressing the button twice shows the current AutoLock™ settings. Pressing the button once when an onscreen display is showing removes the onscreen display.

Cursor Ring
Up/Down: allows you to select the next or previous menu item in the menu. Left/Right: allows you to access the submenus and adjust the settings. When no onscreen displays or menus are present, use the Cursor Ring Left/Right to select a picture format for a video source connected to the ANTENNA, AV1, CVI, AV2, or AV3 (side panel inputs) on the TV.

Volume +/–
Press to adjust the TV sound level.

Number Buttons
Press to select TV channels. When selecting single-digit channels, press the number of the desired channel. The TV will pause for a few seconds and then tune to the selected channel.

TV/VCR
Press while in VCR mode to view the playback of a videotape. Press again to return to TV mode.

A/CH
Press to alternate between the currently viewed channel and the previously viewed channel.

Rec ●
Press this button simultaneously with the ► button when in VCR mode to record.

SAP
Press to select between main sound and SAP (Second Audio Program) when you tune to a program offering SAP. (See page 37 in the *Directions for Use* manual.)

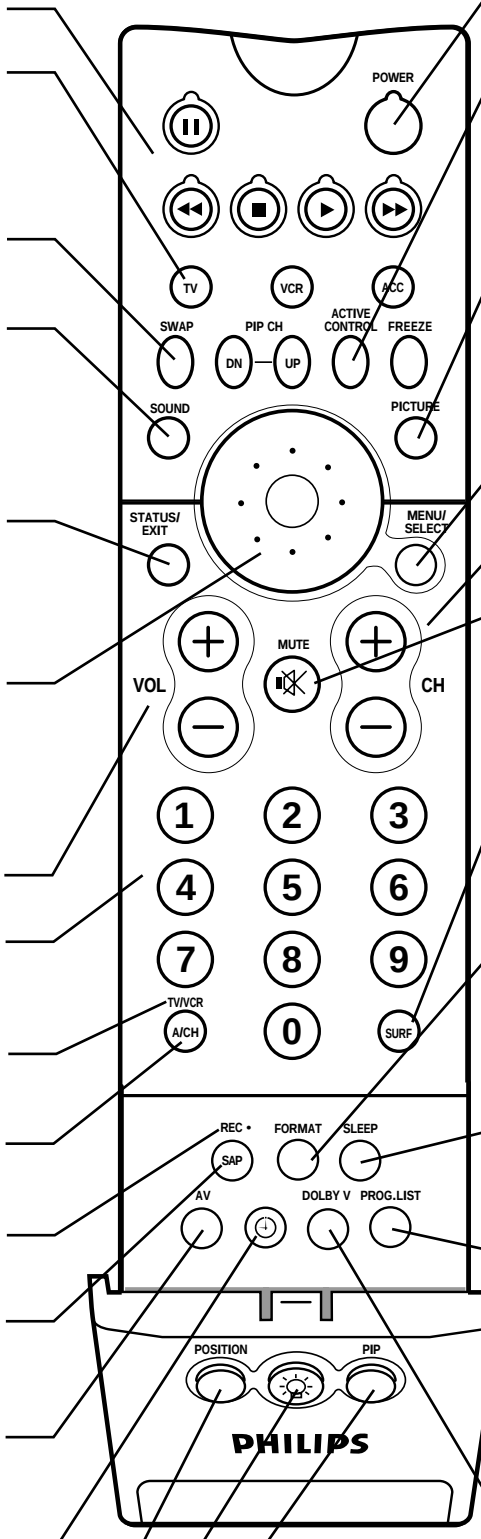
AV
Press repeatedly to select the different signal sources connected to the TV: TV, AV1, CVI, AV2, AV3 (side jack panel), AV4 and AV5. (See page 24 in the *Directions for Use* manual.)

Clock
Press to access the onscreen Timer menu, where you can set the time for the TV's clock or set the TV's Timer features, such as channel switch over, power on set, and power off set. (See page 5 of this publication for setting the time manually. See pages 39–43 in the *Directions for Use* manual for information on using the TV's Timer feature.)

Position
Press to move the PIP picture to any of the four corners of the screen.

Back Light button
Press to light the buttons on the remote control.

PIP
Press to turn PIP (picture-in-picture) on or off or control the size of the PIP window. (See pages 6 and 7 of this publication for more information on PIP.)



Power
Press to turn the TV on or off.

Active Control™
Measures and corrects all incoming signals to provide the best picture-quality settings. (See page 56 in the *Directions for Use* manual.) Press to turn Active Control™ on or off. When Active Control™ is on, it automatically and continuously controls Sharpness and Noise Reduction settings.

Picture
Press to select an AutoPicture™ control. Choose from four factory-set controls—Movies, Sports, Weak Signal, and Multimedia—and a PERSONAL control that you set according to your own preferences through the onscreen Picture menu. (See page 26 in the *Directions for Use* manual.) The four factory-set controls will enhance the TV picture according to the particular type of program you are watching. It may also be used to enhance pictures with weak signals.

Menu/Select
Press to display the onscreen menu. Press to return to a higher menu level.

Channel +/–
Press to select channels in ascending or descending order or cycle through the signal inputs.

Mute
Press to turn the TV sound off. To restore the sound to its previous level, press the button again. (See pages 17 and 53 in the *Directions for Use* manual.)

Surf
Press to select previously entered channels. With the TV's AutoSurf™ control, you can place up to 10 favorite channels or sources in memory. Then by pressing the Surf button, you can quickly view the selected channels. (See page 27 in the *Directions for Use* manual that came with the TV to learn how to select a series of your favorite channels using the Surf button.)

Format
Press to select a picture-format mode for a video source connected to the ANTENNA, AV1, CVI, AV2, or AV3 (side panel) inputs. Each press of the button selects a different mode—4:3, EXPAND 4:3, PANORAMA, WIDE SCREEN, or AUTO. Control the picture format of a video source connected to the HD inputs (AV4 or AV5) with the HD set-top box or progressive-scan-capable DVD player providing the video source.

Sleep
Press to set the TV to automatically turn itself off after a period of time. Choose 15, 30, 45, 60, 90, 120, 180, or 240 minutes before the TV will automatically turn off. (See page 29 in the *Directions for Use* manual.)

Program List
Press to display a list of channel numbers and their names. (See the "Tuner Mode," "Auto Program," "Channel Edit," and "Name" sections on pages 4–6 in this guide for setup.) Each channel will appear as a selectable menu item. The current channel will be highlighted as default. Five channels will be listed on screen at one time. Press the Cursor Ring up or down to scroll the list and and highlight a channel. Press the Cursor Ring right to tune to the highlighted channel. Channels marked "Skipped" in the Channel Edit control will not appear in the list. Each channel that is being blocked by AutoLock™ will appear with a padlock icon to indicate that the channel is not viewable. (See page 28 in the *Directions for Use* manual.)

Dolby V
Press to select various factory surround sound listening modes.

Dolby* Virtual (Virtual Dolby Surround) (with Virtual Dolby Surround signals)
Dolby Virtual uses two speakers to simulate the surround effect produced by a multichannel system.

Incredible Surround™
- In **Stereo** sound mode—when Incredible Surround™ is turned on—it seems as though the loudspeakers are spread farther apart from each another.
- In **Mono** sound mode—when Incredible Surround™ is turned on—enables you to hear a spatial sound effect.

(See page 35 in the *Directions for Use* manual.)

Active Control, AutoPicture, AutoSound, AutoSurf, and Incredible Surround are trademarks of Philips Consumer Electronics Company. Copyright 2001 Philips Consumer Electronics.

*Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

ADJUSTING OR SETTING MENU OPTIONS

A menu is simply a list of options. You can adjust or set your TV's onscreen menu options by pressing buttons on the remote control. The following steps will familiarize you with how to use the remote control with the onscreen menu.

BEGIN

1 **Press the TV mode button** to ensure that the remote control is in TV mode.

2 **Press the MENU/SELECT button** to bring the menu to the screen. Then, as necessary, press the CURSOR RING DOWN or UP to highlight a menu option. Press the CURSOR RING RIGHT to enter the submenu for the option.

3 **Within the submenu, press the CURSOR RING DOWN or UP** to highlight an option.

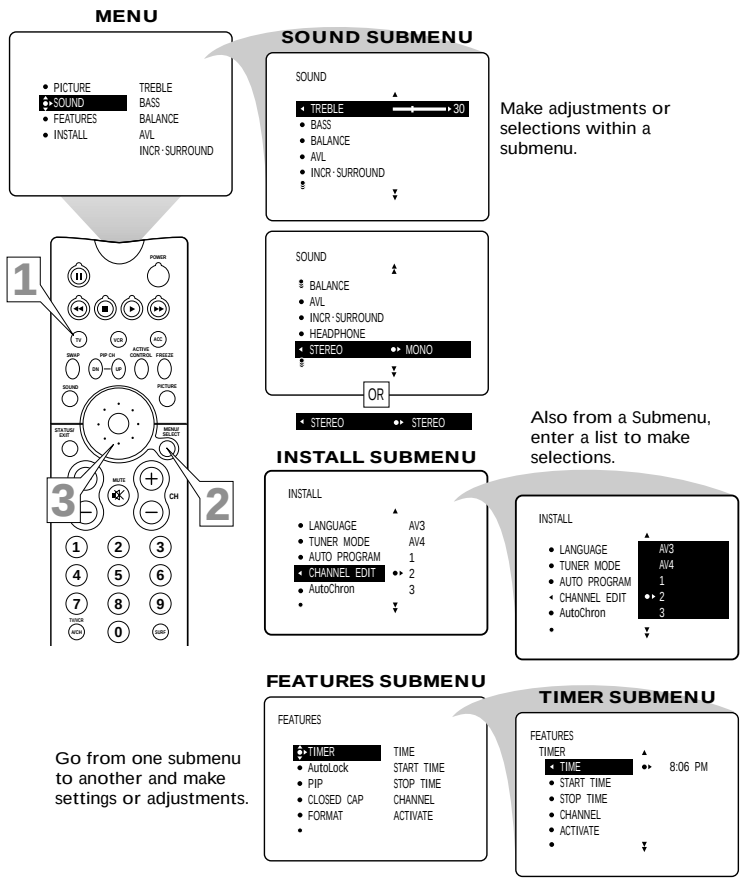
Based on the submenu you are in, you can press the CURSOR RING RIGHT or LEFT to make an adjustment, select a setting, or enter a list or another submenu.

You can return to the submenu from a list by pressing the CURSOR RING LEFT.

To go from a submenu to the previous menu, highlight the option at the top of the screen and press the CURSOR RING UP. You can also press MENU/SELECT to return to the previous menu.

Press STATUS/EXIT to exit the menu.

STOP



HELPFUL HINTS

- If you don't press any remote buttons, the menu will automatically disappear after about 20 seconds. To bring the menu back, press MENU/SELECT.
- Sometimes not all the menu items are visible on the screen. If more items exist in the menu, a cursor arrow will appear. Also, a bullet will appear for each remaining item, up to a maximum of three. This will help you determine how many items are left in the menu. Keep pressing the CURSOR RING DOWN until you display all items.
- Should your remote become lost or otherwise unavailable for use, you can use the buttons on the front of the TV to access the onscreen menu and make adjustments or settings. See page 2.

USING THE INSTALLATION FEATURES

LANGUAGE

The menu LANGUAGE control enables you to set the TV's onscreen menu and onscreen displays to be shown in English, French, or Spanish. Follow the steps in this section to set the control.

BEGIN

1 **Press the MENU/SELECT button**. The onscreen menu appears.

2 **Press the CURSOR RING DOWN** repeatedly until INSTALL is highlighted. Then press the CURSOR RING RIGHT to enter the INSTALL submenu.

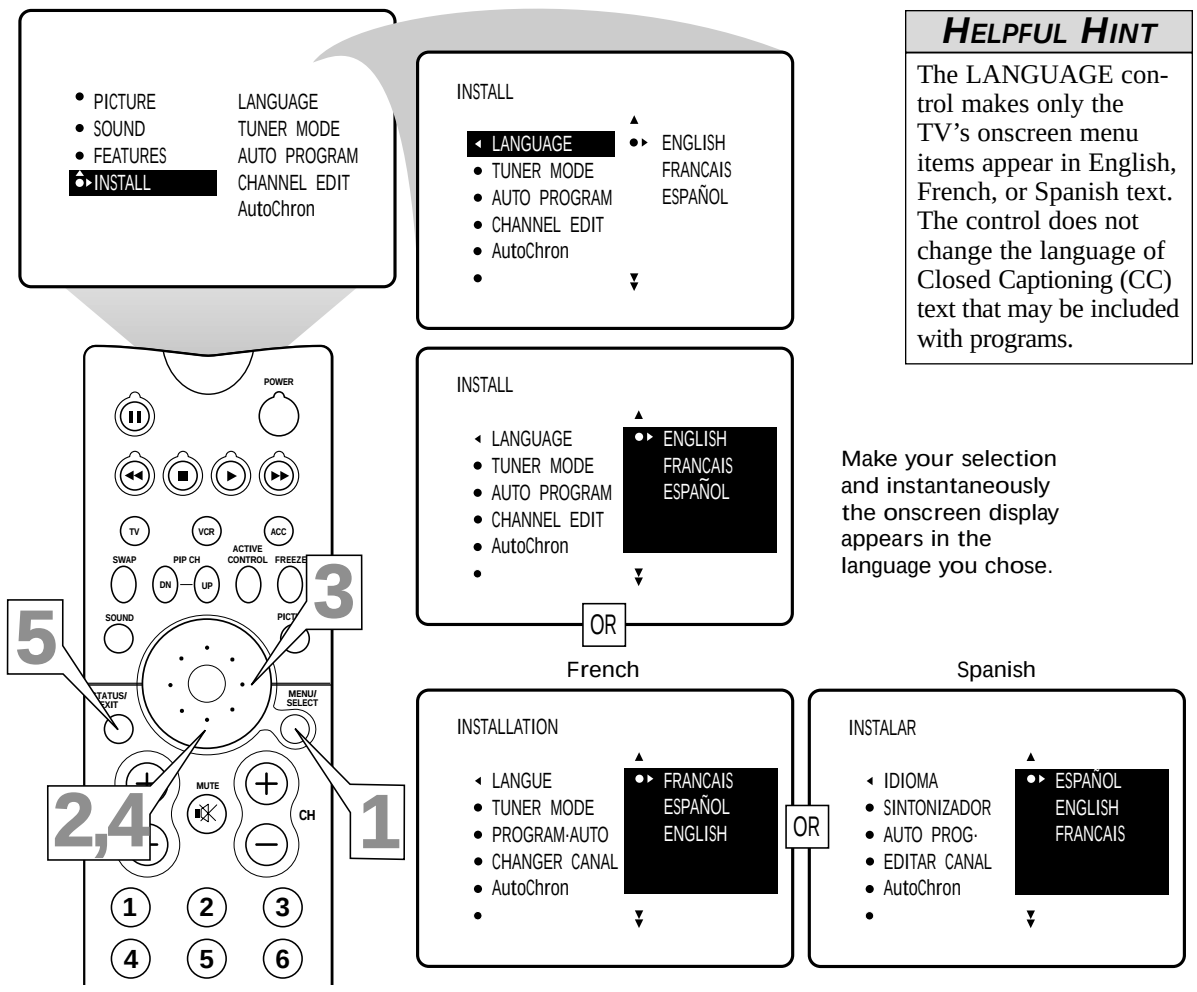
3 **Press the CURSOR RING RIGHT again** to highlight the menu LANGUAGE options list.

4 **Press the CURSOR RING DOWN or UP** to select your menu language.

Instantaneously, the onscreen displays appear in the language that you choose.

5 **Press the STATUS/EXIT button** to exit the menus.

STOP



HELPFUL HINT

The LANGUAGE control makes only the TV's onscreen menu items appear in English, French, or Spanish text. The control does not change the language of Closed Captioning (CC) text that may be included with programs.

Make your selection and instantaneously the onscreen display appears in the language you chose.

TUNER MODE

Set the TUNER MODE control according to the type of signal you have connected to the TV—ANTENNA or CABLE. If you select AUTO, the TV will automatically detect the type of signal you have connected.

BEGIN

1 **Press the MENU/SELECT button**. The onscreen menu appears. Press the CURSOR RING DOWN repeatedly until INSTALL is highlighted.

2 **Press the CURSOR RING RIGHT** to enter the INSTALL submenu. Then press the CURSOR RING DOWN once to highlight TUNER MODE.

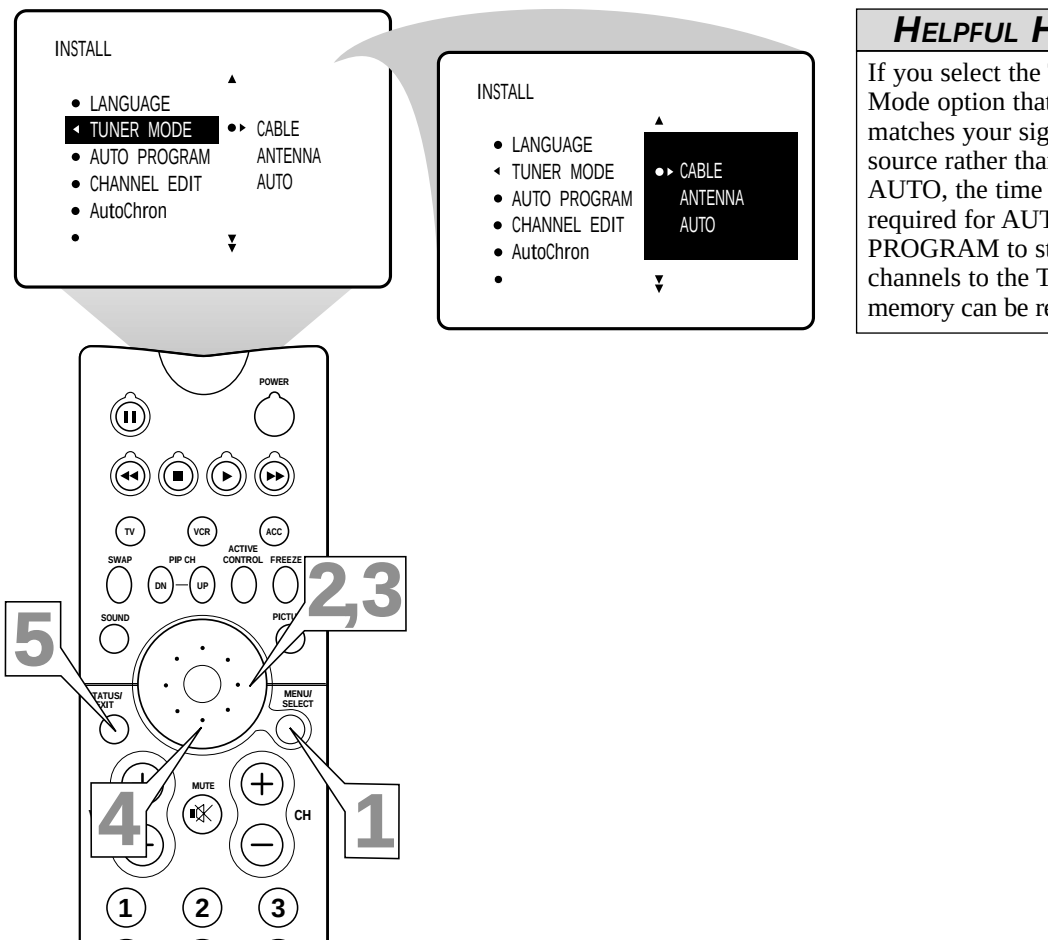
3 **Press the CURSOR RING RIGHT** to highlight the TUNER MODE options list.

4 **Press the CURSOR RING DOWN or UP** repeatedly until you select the option that matches your signal connection, CABLE or ANTENNA. If you want the TV to determine the type of signal, select AUTO. (You have selected an option when the dot and triangle are next to the option.)

5 **Press the STATUS/EXIT button** to exit the menu.

6 **Proceed to the section on "Auto Program."**

STOP



HELPFUL HINT

If you select the Tuner Mode option that matches your signal source rather than AUTO, the time required for AUTO PROGRAM to store channels to the TV's memory can be reduced.

AUTO PROGRAM

The AUTO PROGRAM feature will scan for channels with active broadcast signals and store those channels in the TV's memory. It will tune up to 69 channels for antenna, and up to 125 channels for cable. After you run AUTO PROGRAM, you can use the CH(annel) +/– buttons to quickly and easily select stations. You can also press the PROG. LIST (Program List) button on your remote to see a list of the channels.

BEGIN

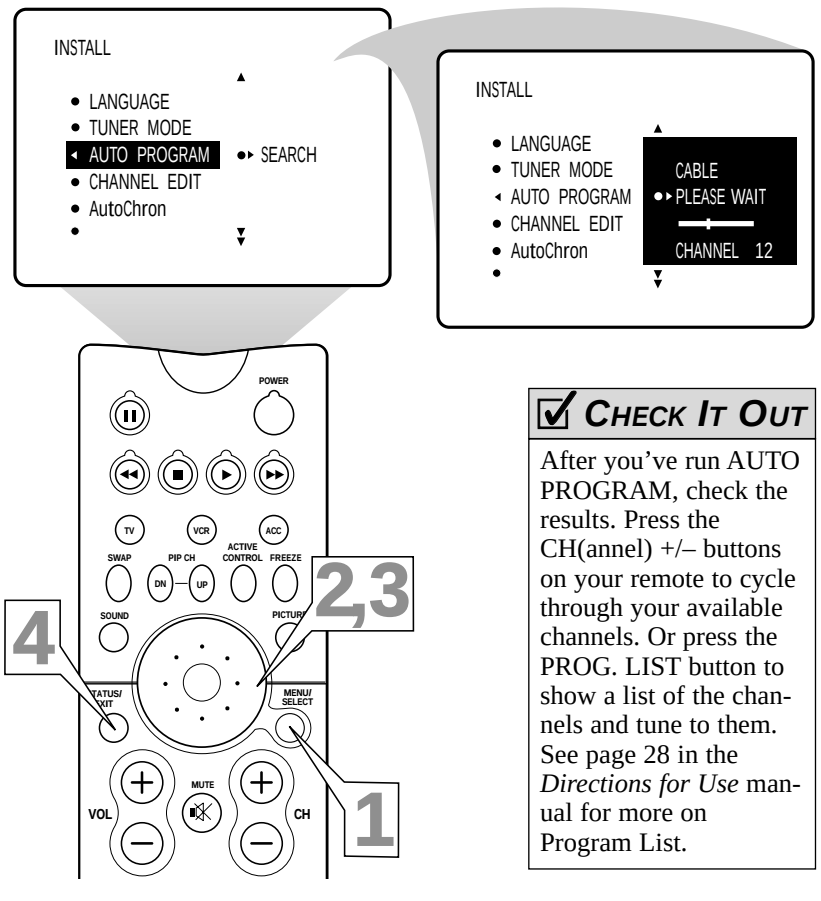
1 **Press the MENU/SELECT button.** The onscreen menu appears. Then press the CURSOR RING DOWN repeatedly until INSTALL is highlighted.

2 **Press the CURSOR RING RIGHT** to enter the INSTALL submenu. Then press the CURSOR RING DOWN repeatedly until AUTO PROGRAM is highlighted.

3 **Press the CURSOR RING RIGHT** to begin the automatic search for channels. The progress of autoprogramming is displayed.

4 **When the programming is done, press the STATUS EXIT button** to exit the menu.

STOP



CHECK IT OUT

After you've run AUTO PROGRAM, check the results. Press the CH(annel) +/– buttons on your remote to cycle through your available channels. Or press the PROG. LIST button to show a list of the channels and tune to them. See page 28 in the *Directions for Use* manual for more on Program List.

HELPFUL HINTS

- Philips strongly recommends that you run Auto Program. Otherwise, the TV may not tune the channels properly, resulting in improper pictures.
- If you change signal sources—to a new cable company or from antenna to cable, for example—be sure that Tuner Mode is properly set for the new source. Then run Auto Program again. This will ensure that the channels are correctly stored in the TV's memory.
- If you have made AutoLock™ settings, remember that you must remove any channel blocks before Auto Program will work. (See pages 44–52 in the *Directions for Use* manual.)

USING THE INSTALLATION FEATURES (CONTINUED)

CHANNEL EDIT

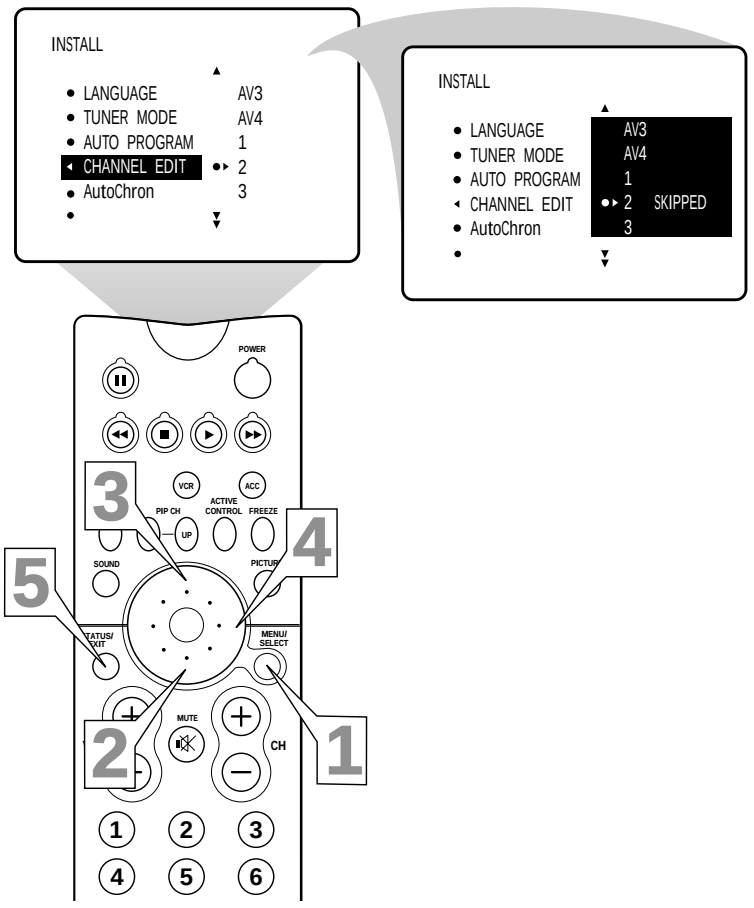
This feature allows you to edit or skip channels from the channel list that have bad or weak signals or channels you do not want to watch.

BEGIN

1. **Press the MENU/SELECT button.** The onscreen menu appears. Then press the CURSOR RING DOWN repeatedly until INSTALL is highlighted. Press the CURSOR RING right to enter the INSTALL submenu.
2. P**ress the CURSOR RING DOWN** repeatedly until CHANNEL EDIT is highlighted. Then press the CURSOR RING RIGHT or LEFT to access the CHANNEL EDIT list.
3. **Press the CURSOR RING UP or DOWN** to scroll through the list of channels. Or press the NUMBER buttons on your remote control to select a specific channel.
4. **With the channel you want to edit selected, press the CURSOR RING RIGHT** to mark the channel as SKIPPED. (Channels you mark SKIPPED will not appear when you use the CH[annel] +/– buttons to change channels while watching TV.)

   When you want to add a channel that has been marked SKIPPED, press the CURSOR RING UP or DOWN to highlight the channel. Then press the CURSOR RING RIGHT to remove the word SKIPPED.
5. **Press the STATUS/EXIT button** to exit the menu.

STOP



HELPFUL HINT

Channels that Auto Program (see page 4) determined not to contain active broadcast signals are marked SKIPPED.

AutoChron

AutoChron™ gives you the option of setting the time manually or automatically.

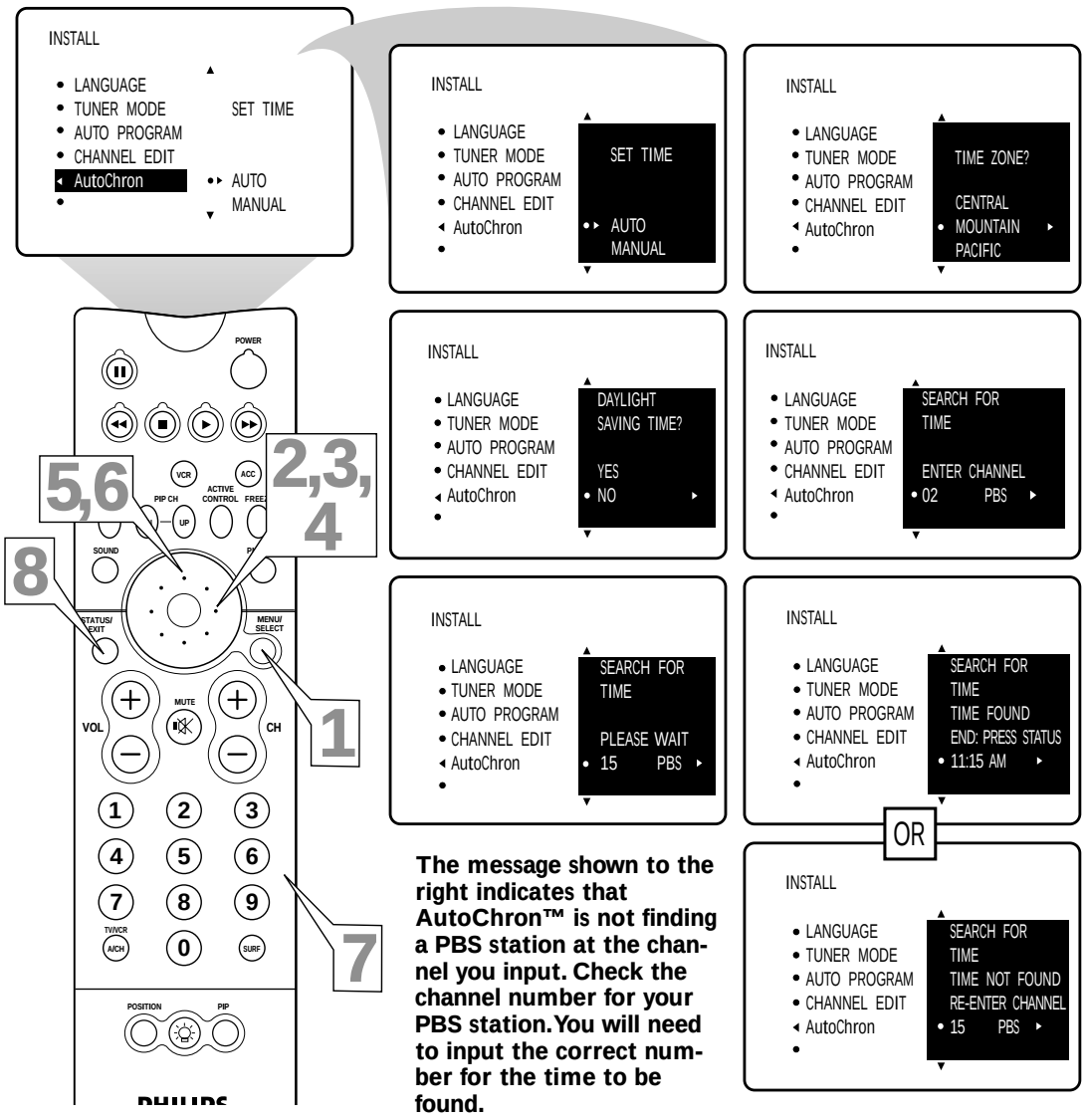
SETTING TIME AUTOMATICALLY

The steps in this section tell you how to set AutoChron™ to download the time from your PBS station to your TV. After successful setup, AutoChron™ will automatically maintain the correct time using your PBS station until you set the time manually.

BEGIN

1. **Press the MENU/SELECT button.** The onscreen menu appears. Then press the CURSOR RING DOWN repeatedly until INSTALL is highlighted.
2. **Press the CURSOR RING RIGHT to enter the INSTALL submenu.** Then press the CURSOR RING DOWN repeatedly until AutoChron is highlighted.
3. **Press the CURSOR RING RIGHT** to enter the AutoChron SET TIME area.
4. **Press the CURSOR RING RIGHT again** to select AUTO. Within a few seconds, a menu containing the time-zone options appears.
5. **If necessary, press the CURSOR RING UP or DOWN** to highlight your correct time zone. Then press the CURSOR RING RIGHT. Within a few seconds, the option of Daylight Savings Time appears on screen.
6. **If the Daylight Savings Time option you want to select is not highlighted, press the CURSOR RING UP or DOWN** to highlight the option. Then press the CURSOR RING RIGHT to activate your selection.
7. **Press the number buttons** on your remote to enter the channel number for your PBS station (02, 15, or 121, for example). Wait until the TV completes its search. If the time was not found, you will need to locate the correct channel number for your PBS station and input that number.
8. **Press the STATUS/EXIT button** to exit the menu.

STOP



The message shown to the right indicates that AutoChron™ is not finding a PBS station at the channel you input. Check the channel number for your PBS station. You will need to input the correct number for the time to be found.

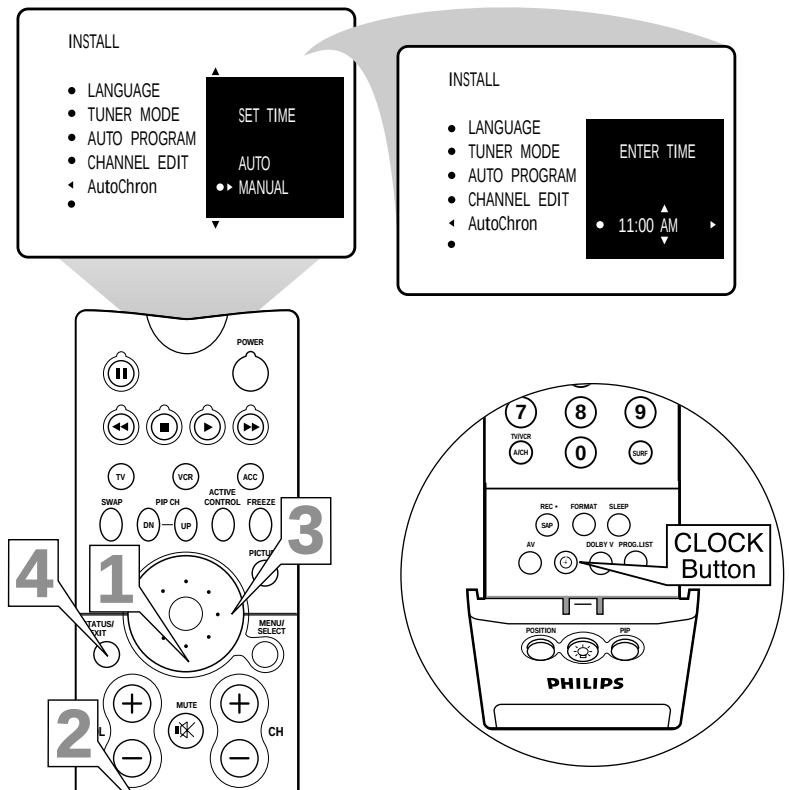
SETTING TIME MANUALLY

BEGIN

1. **Follow steps 1–3 above, then press the CURSOR RING DOWN** to highlight MANUAL and CURSOR RING RIGHT to enter the MANUAL time input area.
2. **Use the number buttons on your remote control** to input the first digit for the time. You can also press the CURSOR RING UP or DOWN to select a digit. Press the CURSOR RING RIGHT to move to the next digit input slot and input the time.

   If you should need to change a number you have input, you can cursor left or right to the digit input slot to make the correction.
3. **After you have input the time, press the CURSOR RING RIGHT** to enter the AM/PM area. Then press the CURSOR RING UP or DOWN to select AM or PM.
4. **Press the STATUS/EXIT button** to exit the menu.

STOP



HELPFUL HINTS

- The CLOCK button ⏲ on your remote provides another way in which you can set the TV's clock manually.
- After setting the clock, you will be able to access the time by pressing the STATUS/EXIT button. Or you can view the time constantly in the upper right-hand corner of the screen by turning the DISPLAY control on (see page 40 in the *Directions for Use* manual).

USING THE INSTALLATION FEATURES (CONTINUED)

NAME

The channel NAME feature allows you to list the "call" letters of your favorite stations beside their channel numbers when they appear on the screen. The TV has in memory a list of the 50 most popular channel names (NBC, ABC, or FOX, for example). You also can enter a custom name (up to five characters).

BEGIN

1 **Press the NUMBER buttons, the CH(annel) +/– buttons, or the AV button** to select a TV channel or input source to which you want to assign a name or whose name you want to modify.

2 **Press the MENU/SELECT button.** The onscreen menu appears. Then press the CURSOR RING DOWN repeatedly until INSTALL is highlighted. Press the CURSOR RING RIGHT to enter the INSTALL submenu.

3 **Press the CURSOR RING DOWN** repeatedly until the NAME control is highlighted. Then press the CURSOR RING RIGHT to highlight the NAME options area.

4 At this point you can choose between options of creating a personal name for the channel or selecting a preset one from a list.

To create your own personal name for the channel or change a personal name you created previously, press the CURSOR RING RIGHT. Then press the CURSOR RING UP or DOWN to select the first character of the name. You can input up to five characters for the name. When finished, press the MENU/SELECT button.

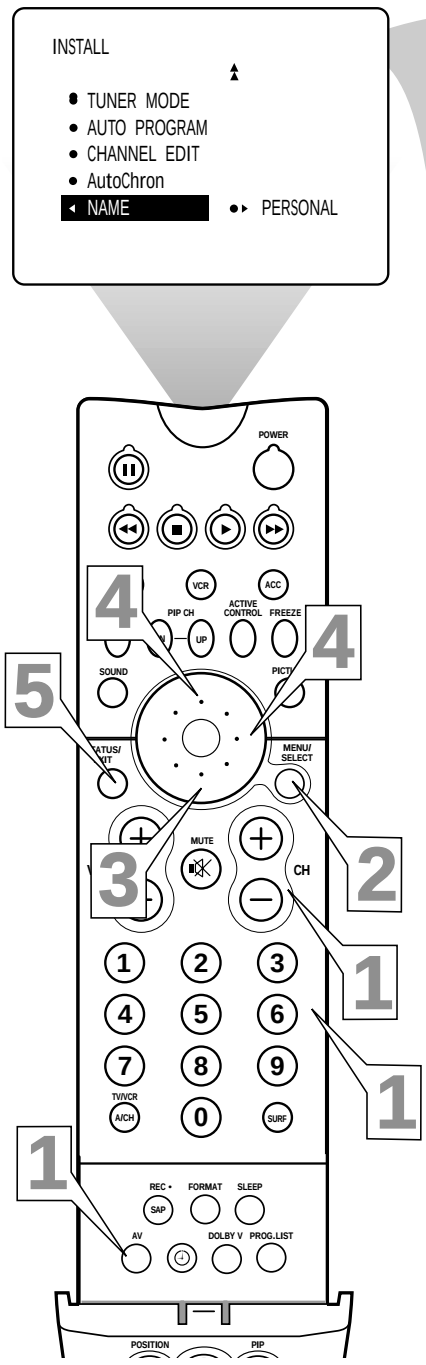
Or

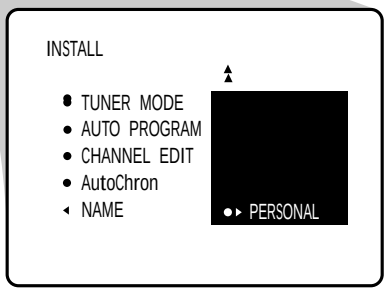
To choose from the list of preset names, press the CURSOR RING UP or DOWN to highlight your choice for the channel name. Press the CURSOR RING RIGHT to select the name. Then press the MENU/SELECT button.

5 **Press the STATUS/EXIT button** to exit the menu.

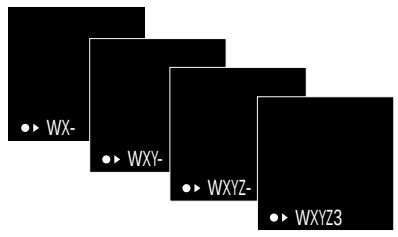
When you press the STATUS/EXIT button when no onscreen display is present or change to the channel you've named, the name will appear on screen next to the channel number or signal source name.

STOP



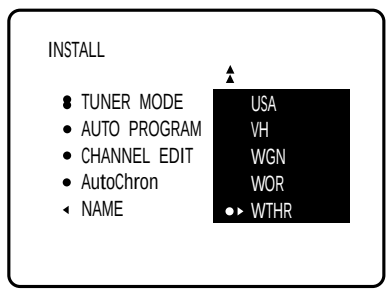


Create your own personal name for a channel.



OR

Choose from a list of preset options.



HELPFUL HINTS

- The five PERSONAL name characters you can input may be letters, a dash, or the numbers 0 through 9.
- If you begin inputting a personal name or changing an existing one and decide you'd rather select a name from the preset list, press the MENU/SELECT button. This will return you to the INSTALL submenu, with NAME highlighted. Simply press the CURSOR RING RIGHT to highlight the NAME options area again and choose a preset name as explained in step 4 to the left.

USING THE PICTURE-IN-PICTURE (PIP) FEATURE

MAKING PIP CONNECTIONS

Picture-In-Picture (PIP) is the showing of two pictures on the TV screen at the same time—one main screen picture and one small picture, or PIP. The picture for the PIP window can come from an antenna or cable TV signal, or from AV1, AV2, or AV3. ***NOTE:*** *CVI cannot be displayed in the PIP window, and AV4 and AV5 are not available for use with PIP.*

The following connections explained below will allow you to use a VCR as a second tuner specifically for PIP. In other words, you can use the VCR to select channels for viewing in the PIP window. This is just one example of how you can use PIP. Note, too, that you can swap the main and PIP pictures on screen. See page 7 in this publication for information on viewing PIP pictures and using the PIP buttons.

To make the connections shown in this example, you will need:

- *a two-way signal splitter*
- *two coaxial cables (75Ω)*
- *one cable for a video connection (standard RCA connector)*
- *two cables for audio connections (standard RCA connectors).*

NOTE: *The two-way signal splitter and cables are not supplied with your TV. You should be able to buy them at most stores that sell electronics. Or you can call our Customer Care Center at 1-800-531-0039.*

BEGIN

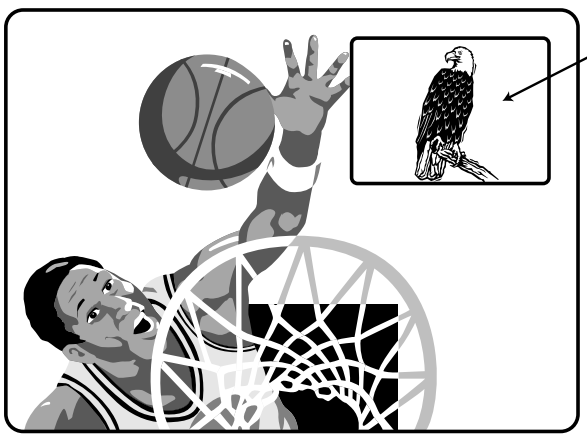
1 **Connect an antenna or cable TV signal** to a two-way signal splitter.

2 **Use coaxial cables** to connect from the two-way signal splitter to the ANTENNA IN 75Ω jack on the rear of the TV and to the ANTENNA IN jack on the rear of the VCR.

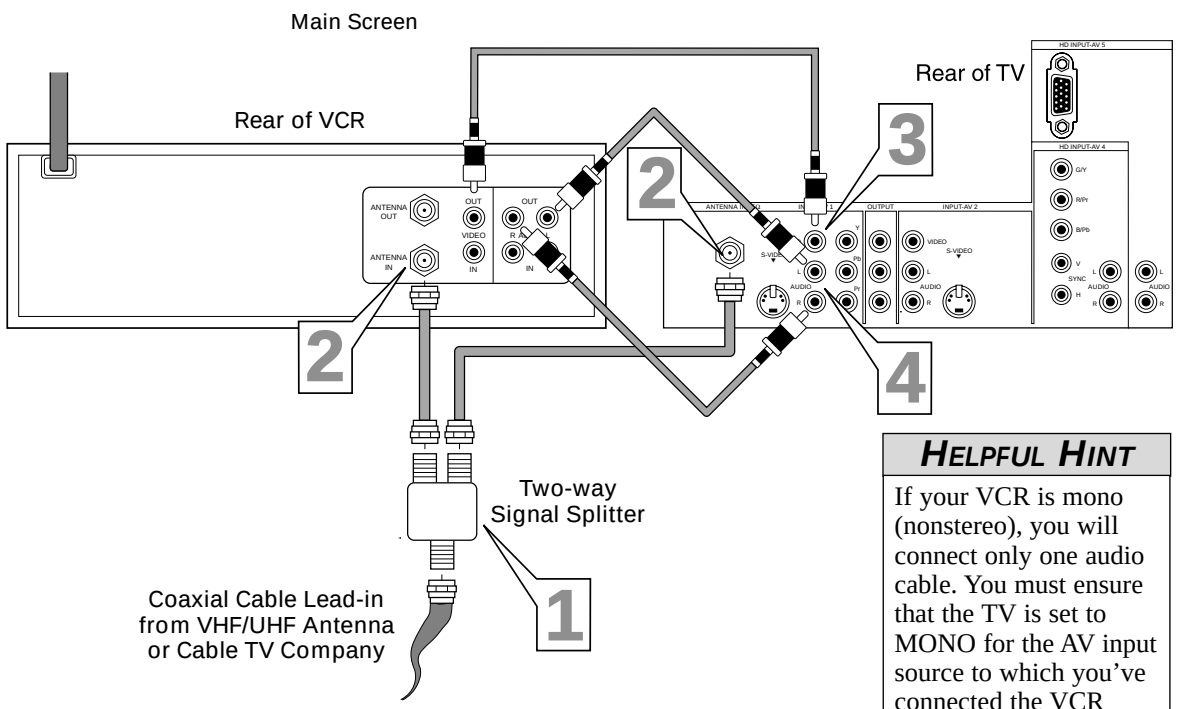
3 **Connect the VIDEO OUT jack** on the VCR to the INPUT-AV1 VIDEO jack on the rear of the TV.

4 **Connect the AUDIO OUT jacks, L(eft)/R(ight),** on the rear of the VCR to the INPUT-AV 1 AUDIO jacks, L(eft)/R(ight,) on the rear of the TV.

STOP



Main Screen



CHECK IT OUT

You can use a variety of connections to provide input sources for viewing in PIP. For more information, see the section on "Connecting Accessory Devices to Your TV," beginning on page 6 in the *Directions for Use* manual.

HELPFUL HINT

If your VCR is mono (nonstereo), you will connect only one audio cable. You must ensure that the TV is set to MONO for the AV input source to which you've connected the VCR (AV1, AV2, or AV3 [side panel]). Otherwise, you will receive sound from only one of the TV's speakers. See page 36 in the *Directions for Use* manual that came with the TV.

USING THE PICTURE-IN-PICTURE (PIP) FEATURE (CONTINUED)

VIEWING PICTURES

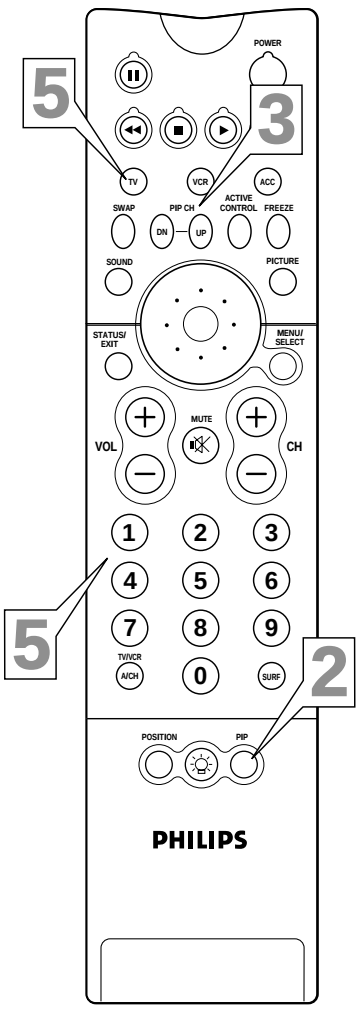
The steps below take you through the process of using a VCR as a tuner to select channels for viewing in PIP.

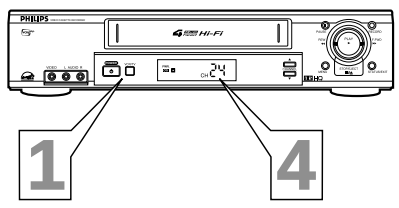
BEGIN

1. **Turn the VCR and TV on.** Then press the VCR/TV button on the VCR to place the VCR in TV mode.
2. **If the PIP window isn't already on the screen, press the PIP on/off button** on the TV remote. The PIP window will show in one of the four corners of the TV screen.
3. **Press the PIP CH DN/UP button** until the input source to which you connected the VCR appears in the PIP window. The onscreen display appear briefly to identify the signal source.
4. **Select the channel on the VCR** to view in the PIP window.

   You can select channels on your VCR with your TV remote if the remote is programmed to work with the VCR. You must press the VCR mode button first to send commands to the VCR. (See pages 18–23 in the *Directions for Use* manual.)
5. **Press the TV button on your TV remote and select the channel** on your TV that you want to watch on the main screen.
6. **Go to the next section** to familiarize yourself with the functions of the PIP buttons.

STOP





HELPFUL HINT

If you use your TV remote to operate the VCR, be sure the TV remote is in the correct mode when you switch back and forth between VCR and TV.

WARNING

Be careful not to leave the PIP window on the screen continuously for an extended period time. Doing so day after day for a couple of hours or more may cause picture tube damage.

USING THE PIP BUTTONS

Using the PIP buttons on the remote, you can move the PIP window around and swap it with the main screen. You can also freeze the PIP window picture.

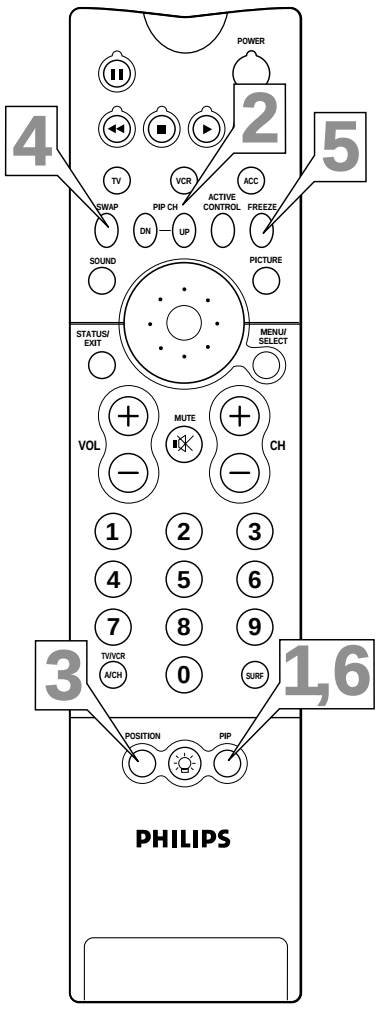
BEGIN

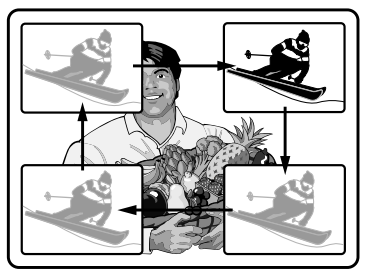
1. **Press the PIP on/off button** to show the PIP window. PIP appears in a corner of the TV screen. Press the PIP on/off again to reduce the PIP window size, and a third time to remove the PIP window from the screen. Press the PIP on/off button again to show the PIP window.
2. **Press the PIP CH DN/UP buttons** to access a signal source in the PIP window.
3. **Press the PIP POSITION button** to move the PIP window from corner to corner on the TV screen.

   This feature allows you to move PIP and avoid blocking any main-screen action.
4. With PIP on the TV screen, **press the SWAP button** to swap the main and PIP pictures. Press SWAP again to swap the pictures back.
5. **Press the FREEZE button** to stop motion within the PIP window.

   Stopping motion will allow you to write down onscreen phone numbers or addresses.
6. **Press the PIP on/off button,** multiple times if necessary, to remove the PIP window from the screen.

STOP





POSITION

SWAP

FREEZE

HELPFUL HINT

When you press the PIP on/off button to show the PIP window, the window will appear where it was located the last time it was displayed.

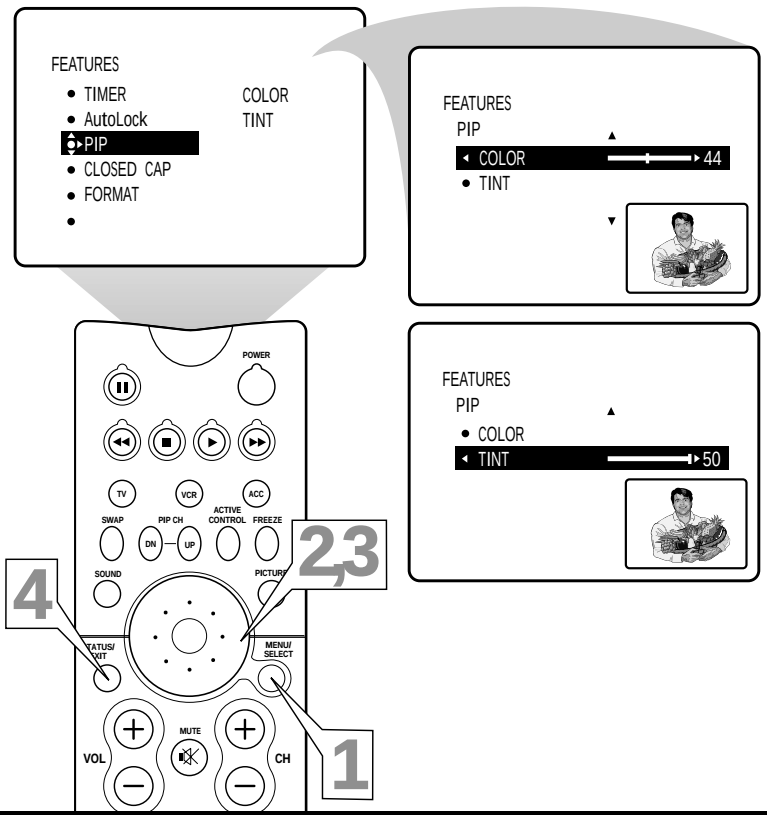
ADJUSTING COLOR AND TINT

The Picture-in-Picture (PIP) COLOR and TINT controls allow you to make fine-tune adjustments to the PIP picture settings.

BEGIN

1. **Press the MENU/SELECT button.** The onscreen menu appears. Then press the CURSOR RING DOWN twice to highlight FEATURES.
2. **Press the CURSOR RING RIGHT** to enter the FEATURES submenu. Then press the CURSOR RING DOWN repeatedly until the PIP item is highlighted in the submenu. Press the CURSOR RING RIGHT to enter the PIP submenu.
3. **Press the CURSOR RING RIGHT or LEFT** to adjust the COLOR to the desired level. Then press the CURSOR RING DOWN to highlight the TINT adjustment bar. Press the CURSOR RING RIGHT or LEFT to adjust the TINT bar to the desired level.
4. **Press the STATUS/EXIT** button to exit the menu.

STOP



ADJUSTING THE MANUAL CONVERGE CONTROLS

CONVERGE RED/BLUE

Convergence is the correct lining up of the red and blue light paths on the TV screen. If the paths don't line up, color fringes will appear around objects on screen. If no color fringes show, then no convergence adjustments are necessary. ***NOTE:*** *Allow the TV to warm up 20 minutes before adjusting convergence. See the chart to the right for guidance as to which convergence controls to use.*

BEGIN

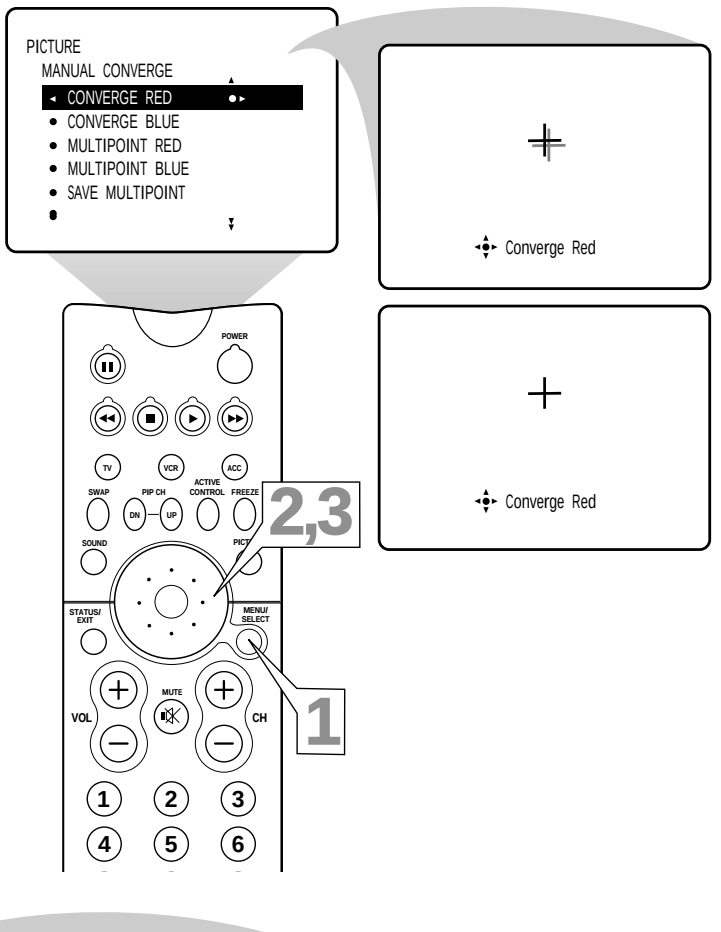
1 **Press the MENU/SELECT button.** The menu appears. Press the CURSOR RING RIGHT to enter the PICTURE submenu. Then press the CURSOR RING DOWN until MANUAL CONVERGE is highlighted.

2 **Press the CURSOR RING RIGHT** to enter the MANUAL CONVERGE submenu. If you want to adjust the Red Convergence, press the CURSOR RING RIGHT to enter the adjust mode. If you want to adjust the Blue Convergence, press the CURSOR RING DOWN to highlight CONVERGE BLUE, then press the CURSOR RING RIGHT to enter adjust mode.

3 **In adjust mode, press the CURSOR RING RIGHT, LEFT, UP, or DOWN** to adjust the cross hair until the color outline around it is gone. (The adjustment is automatically saved in the TV's memory.) To return to the MANUAL CONVERGE menu, press the MENU/SELECT button. To exit the onscreen display, press the STATUS/EXIT button.

STOP

Screen appearance	Action
Various images throughout the entire picture have red outlines.	Adjust the CONVERGE RED control. Then if any red outlines remain, adjust the MULTIPOINT RED control.
Various images throughout the entire picture have blue outlines.	Adjust the CONVERGE BLUE control. Then if any blue outlines remain, adjust the MULTIPOINT BLUE control.



MULTIPOINT RED/BLUE

The Multipoint Red/Blue Convergence controls enable you to adjust the convergence at specific points on the TV screen.

NOTE: *The onscreen display will leave the screen after 20 seconds of inactivity. If this happens, simply press the MENU/SELECT button to bring the MANUAL CONVERGE submenu back.*

BEGIN

1 **Press the MENU/SELECT button**. The menu appears. Press the CURSOR RING RIGHT to enter the PICTURE menu. Then press the CURSOR RING DOWN until MANUAL CONVERGE is highlighted.

2 **Press the CURSOR RING RIGHT** to enter the MANUAL CONVERGE submenu. Press the CURSOR RING DOWN until MULTIPOINT RED or MULTIPOINT BLUE is highlighted. Then press the CURSOR RING LEFT or RIGHT to enter Navigate mode.

3 **Press the CURSOR RING LEFT, RIGHT, UP, or DOWN** to move to a cross hair that has a color outline. Then press the STATUS/EXIT button to enter adjust mode.

4 **Press the CURSOR RING LEFT, RIGHT, UP, or DOWN** to adjust the cross hair image until the color outline is gone.Then press the STATUS/EXIT button to return to NAVIGATE mode. Repeat steps 3 and 4 until all misaligned cross images have been adjusted.

5 **After making your adjustments, you must store them in the TV's memory using SAVE MULTIPOINT.**
NOTE: If you are not satisfied with the adjustments you just made and want to start over, you can use the UNDO MULTIPOINT control. This control allows you to undo the adjustments, but it will work only if you use it before saving.

To save your multipoint adjustments, press the MENU/SELECT button. This returns you to the MANUAL CONVERGE menu. Press the CURSOR RING DOWN until SAVE MULTIPOINT is highlighted. Then press the CURSOR RING LEFT or RIGHT to store your adjustments in the TV's memory.

OR

To undo the multipoint adjustments you just made, press the MENU/SELECT button. This returns you to the MANUAL CONVERGE menu. Press the CURSOR RING DOWN until UNDO MULTIPOINT is highlighted. Press the CURSOR RING LEFT or RIGHT to undo the adjustments. Press the CURSOR RING UP until MULTIPOINT RED or MULTIPOINT BLUE is highlighted. Press the CURSOR RING LEFT or RIGHT to enter Navigate mode. Then Follow steps 3–5 above to make your adjustments again.

OR

To restore the TV's convergence to factory settings, press the MENU/SELECT button. This returns you to the MANUAL CONVERGE menu. Press the CURSOR RING DOWN until RESTORE FACTORY is highlighted. Then press the CURSOR RING LEFT or RIGHT to restore the TV's convergence to factory settings.

6 **Press the STATUS/EXIT button** to exit the submenu.

STOP

HELPFUL HINT

If you should experience a power outage before saving your multipoint-convergence settings, your settings will be lost.